

LISTING OF THE CLAIMS

A detailed listing of claims is presented below. Please amend currently amended claims as indicated below including substituting clean versions for pending claims with the same number. In addition, clean text versions of pending claims not being currently amended that are under examination are also presented. It is understood that any claim presented in a clean version below has not been changed relative to the immediate prior version.

1. (Currently Amended) A display unit comprising:

a matrix of independently controllable pixels comprising m rows and n columns of discrete pixels, said matrix for generating an image therein by light modulation and wherein said image is representative of information stored in a frame buffer memory; and

a pixel border having a predetermined width, said pixel border surrounding said matrix of independently controllable discrete pixels and comprising dummy pixels, wherein each dummy pixel is analogous to a pixel of said matrix but without containing any active element driven by a driver circuit and not capable of modification, and wherein said dummy pixels allow light to pass through to improve contrast of edge-displayed images of said matrix and to match the background pixel color of said matrix of independently controllable pixels.

2. (Original) A display unit as described in Claim 1 and further comprising a back lighting element for illuminating said matrix and said pixel border.

3. (Original) A display unit as described in Claim 2 wherein each pixel of said matrix comprises:

a red subpixel having a first active element;

a green subpixel having a second active element; and

a blue subpixel having a third active element.

4. (Original) A display unit as described in Claim 3 wherein each dummy pixel of said matrix comprises:

a red sub-dummy-pixel having a first active element;
a green sub-dummy-pixel having a second active element; and
a blue sub-dummy-pixel having a third active element.

5. (Original) A display unit as described in Claim 1 wherein said predetermined width is two pixels.

6. (Original) A display unit as described in Claim 1 wherein said matrix comprises 160 rows and 160 columns of discrete pixels.

7. (Original) A display unit as described in Claim 1 wherein said matrix is fabricated using thin film transistor liquid crystal display technology.

8. (Currently Amended) A portable electronic device comprising:

a processor coupled to a bus;
a memory unit coupled to said bus;
a user input device coupled to said bus; and
a display unit coupled to said bus and comprising:

a matrix of independently controllable pixels comprising m rows and n columns of discrete pixels, said matrix for generating an image therein by light modulation and wherein said image is representative of information stored in a frame buffer memory; and

a pixel border having a predetermined width, said pixel border surrounding said matrix of independently controllable discrete pixels and comprising dummy pixels, wherein each dummy pixel is analogous to a pixel driven by a driver circuit and not capable of modification, and wherein said dummy pixels allows light to pass through to improve contrast of edge-displayed images of said matrix and to match the background pixel color of said matrix of independently controllable pixels.

9. (Original) A portable electronic device as described in Claim 8 further comprising a back lighting element for illuminating said matrix and said pixel border.

10. (Original) A portable electronic device as described in Claim 9 wherein each pixel of said matrix comprises:

- a red subpixel having a first active element;
- a green subpixel having a second active element; and
- a blue subpixel having a third active element.

11. (Original) A portable electronic device as described in Claim 10 wherein each dummy pixel of said matrix comprises:

- a red sub-dummy-pixel having a first active element;
- a green sub-dummy-pixel having a second active element; and
- a blue sub-dummy-pixel having a third active element.

12. (Original) A portable electronic device as described in Claim 8 wherein said predetermined width is two pixels.

13. (Original) A portable electronic device as described in Claim 8 wherein said matrix comprises 160 rows and 160 columns of discrete pixels.

14. (Original) A portable electronic device as described in Claim 8 wherein said matrix is fabricated using thin film transistor liquid crystal display technology.

15. (Currently Amended) A display unit comprising:
a matrix of independently controllable pixels comprising m rows and n columns of discrete pixels, said matrix for generating an image therein by light modulation and wherein said image is representative of information stored in a frame buffer memory and wherein each pixel of said matrix comprises a respective active element and respective filter elements;
a pixel border having a predetermined width, said pixel border surrounding said matrix of independently controllable discrete pixels and comprising dummy pixels, wherein each dummy pixel comprises respective filter elements without any active element driven by a driver circuit and not capable of modification, and wherein said dummy pixels allows light to pass through to improve contrast of edge-displayed images of said matrix and to match the background pixel color of said matrix of independently controllable pixels; and
a back lighting element for illuminating said matrix and said pixel border.

16. (Original) A display unit as described in Claim 15 wherein said respective filter elements of each pixel of said matrix comprises:

a red filter;
a green filter; and
a blue filter.

17. (Original) A display unit as described in Claim 16 wherein said respective filter elements of each dummy pixel of said matrix comprises:

a red filter;

a green filter; and

a blue filter.

18. (Original) A display unit as described in Claim 15 wherein said predetermined width is two pixels.

19. (Original) A display unit as described in Claim 15 wherein said matrix comprises 160 rows and 160 columns of discrete pixels.

20. (Original) A display unit as described in Claim 15 wherein said matrix is fabricated using thin film transistor liquid crystal display technology.